

REMARKS

Claims 1-10 and 15-24 are pending in this application.

Applicant appreciates the courtesies shown to Applicant's representative by Examiner Mai in the May 2, 2007 interview. Applicant's separate record of the substance of the interview is incorporated into the following remarks.

I. Allowable Subject Matter

Applicant notes with appreciation that claims 3-10 and 17-23 contain allowable subject matter.

II. Rejection Under 35 U.S.C. 102(b)

Claims 1 and 2 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent No. 6,225,249 ("Fujita"). This rejection is respectfully traversed.

The Patent Office alleges that Fujita teaches or suggests all of the features recited in the method of claim 1. Applicant strenuously disagrees.

Fujita teaches producing an aluminum nitride sintered body and mixing an aluminum nitride powder, an yttrium compound powder and at least one kind of lanthanoid compound powder, dewaxing the powder, and subsequently sintering the dewaxed body at a temperature between 1600 and 2000°C in a non-oxidizing atmosphere. See column 4, lines 61-66 of Fujita.

Nowhere does Fujita teach or suggest a method comprising sintering a mixture comprising (1) a source compound for yttrium, (2) a source compound for aluminum, and (3) aluminum nitride, to produce a sintered body of yttrium-aluminum garnet, as recited in claim 1.

Specifically, Fujita does not teach or suggest a mixture comprising (1) a source compound for yttrium, (2) a source compound for aluminum and (3) an aluminum nitride. Instead, Fujita merely teaches the use of an aluminum nitride powder and yttrium compound

powder. The Patent Office alleges that the aluminum nitride powder taught by Fujita can be the source compound for aluminum and the aluminum nitride recited in claim 1. This is incorrect.

As described in the specification and as recited in the claims, the source compound for aluminum and the aluminum nitride are not one compound. As explained in the specification, the aluminum nitride is used as a sintering aid in producing a sintered body of yttrium-aluminum garnet. See paragraph 10 of the specification. Further, in Example 1 of the specification, the source compound for aluminum is clearly aluminum oxide powder. The aluminum nitride powder sintering aid is a separate component from the source compound for aluminum in the method of producing the sintered body of yttrium-aluminum garnet as recited in claim 1. As such, the Patent Offices' allegation that the aluminum nitride taught by Fujita can act as both the source compound for aluminum and the aluminum nitride of the present claims is incorrect in view of claim 1 and the description of each compound set forth in the specification.

Moreover, Fujita does not teach or suggest a method of producing a sintered body of yttrium-aluminum garnet as recited in claim 1. As is clear from the title of Fujita, Fujita is directed to an aluminum nitride sintered body. Although the aluminum nitride sintered body may include a certain amount of yttrium-aluminum garnet, such amounts are very small, e.g., 0.5 to 10 wt % in extremes for aluminum nitride phase. See column 5, lines 1 and 2 of Fujita. Such minute amounts of yttrium-aluminum garnet present in the aluminum nitride sintered body is not equivalent to a sintered body of yttrium-aluminum garnet as recited in claim 1.

Thus, Applicant submits that Fujita does not teach or suggest a method comprising the step of sintering a mixture comprising a source compound for yttrium, a source compound for aluminum, and aluminum nitride to produce a sintered body of yttrium aluminum garnet, as recited in claim 1.

For the foregoing reasons, Applicant submits that Fujita does not teach or suggest all of the features recited in claims 1 and 2. Reconsideration and withdrawal of the rejection are thus respectfully requested.

III. Rejection Under 35 U.S.C. §103(a)

Claims 15, 16 and 24 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Fujita in view of JP08. This rejection is respectfully traversed.

From the Patent Office's rejection, it is unclear which Japanese reference of record is "JP08." However, from the explanation of the rejection, Applicant believes that the Patent Office refers to JP 06-107456 ("JP 456"). Thus, Applicant will address this rejection as relying upon Fujita in view of JP 456.

The Patent Office admits that Fujita does not teach or suggest fixing a source compound for yttrium and a source compound for aluminum, and calcining the mixture to generate yttrium-aluminum garnet. It appears that the Patent Office introduces JP 456 as teaching an yttrium-aluminum garnet material formed by calcining a mixture of yttrium oxide and aluminum oxide.

However, JP 456 does not remedy all of the deficiencies of Fujita. Specifically, JP 456 also does not teach or suggest a method including (1) a source compound for yttrium, (2) a source compound for aluminum, and (3) aluminum nitride, as recited in claim 15. Neither Fujita nor JP 456 teach or suggest introducing aluminum nitride to the yttrium-aluminum garnet formed from a source compound for aluminum and a source compound for yttrium, and then sintering the mixture of the aluminum nitride and yttrium-aluminum garnet to produce a sintered body of yttrium-aluminum garnet as recited in claim 15.

Furthermore, one of ordinary skill in the art would not have combined the teachings of Fujita and JP 456 as alleged by the Patent Office. Fujita is directed to a method of producing an aluminum nitride sintered body, while JP 456 is directed to a method of producing an

yttrium-aluminum garnet sintered body. Thus, one of ordinary skill in the art would not have looked to the yttrium-aluminum garnet sintered body taught by JP 456 to modify the aluminum nitride sintered body taught by Fujita.

For the foregoing reasons, Applicant submits that Fujita and JP 456, in combination or alone, do not teach or suggest all of the features recited in claims 15, 16 and 24.

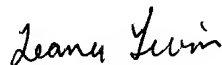
Reconsideration and withdrawal of the rejection are thus respectfully requested.

IV. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-10 and 15-24 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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